

## Update on Flint Hills modeling project - using RARE funding

**Brenda Groskinsky** to: Joshua Tapp

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AM

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To:

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Hi Josh,

Per your request yesterday here is a short description of accomplishments to date and the next steps. Also attached is our 2013 RARE abstract for the continuing effort. Bob and I have starting looking into the available vehicles to hire a post doc, and plan to the have the advertisement out there ASAP to acquire someone by spring 2013. The funding has been approved and we want to be ready to spend it FY13 funds are available. I'm attaching a presentation from last summer summarizing Doug's and Rhett's (KSTATE) modeling efforts as well. As you can see in our next steps section listed below - we intend to use 2013 RARE to further the fuel load and air quality modeling components.

*Please send me info about the webinar you plan to give next month, and let me know if you need anything else. Thanks! bg*

The Flint Hills RARE project collaboration of Region 7, ORD and Kansas State University has thus far produced:

- (1) Flint Hills spatial data sets describing climate, elevation, land cover, soils and geology, and historical (2003-2009) patterns of rangeland burning;
- (2) Demonstration of an ecohydrological model for Konza Prairie and a 1,000 square kilometer rangeland west of Topeka (Wabaunsee County) to simulate effects of burning, grazing and other disturbances on fuel loads, biomass production, water quality and quantity, greenhouse gases, habitat quality, and other vital ecosystem

services;

- (3) Demonstration of a prototype smoke diffusion (plume) model for the April 1983 Flint Hills burn event (simulations conducted by Doug Goodin of KSU and Scott Goodrick of USFS).

Next steps using RARE funding for FY 2013-2014, include hiring a postdoctoral student contractor to assist with integrating the fuel load and air quality modeling components. An economic component will also be added by ORD. The goal is to establish a user-friendly decision support framework that Region 7 policy makers and stakeholders can use to explore how alternative SMPs affect ecological, economic and human health trade-offs, for both urban and rural communities. In addition to addressing Region 7 stakeholder concerns, this work is also contributing to EPA's Sustainable and Healthy Communities Research Program.



R7RARE\_2013\_FlintHills\_abstract.pdf



FlintHills\_LTER Site Review\_June2011\_DGoodin.pdf

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